

# Mass Disaster Operations

Medical Examiner Mass Fatality Management  
Orientation

# Multiple Fatality Incidents

- Number of casualties exceeds available resources
- Necessity for local personnel to be able to sustain for at least 3 days
- Basic framework of mass disaster plan
  - Effective utilization of trained personnel
  - Streamlined examination and identification of decedents
    - No margin for error



# Pathology of Disaster

- First responders are often also victims
- Major drain on personnel
- Wealth of documentation
  - Antemortem / postmortem data
  - Government reimbursement issues
- Must be ever vigilant for the “outliers”
  - Explosion epicenter
  - Staged homicide



# Multiple Fatality Incidents

- Natural Events
  - Floods
  - Earthquakes
  - Hurricanes
- Accidents
  - Transportation
  - Industrial
- Terrorism
  - Explosives
  - Chemical Agents
  - Biological Agents

# Multiple Fatality Incidents

- Mother Nature

**U.S.**

**Heat wave killing people, crops and cattle**

**Lindsay Lohan overcome by heat on movie set**

Thursday, July 27, 2006; Posted: 2:28 p.m. EDT (18:28 GMT)

**SAN FRANCISCO, California (AP)**  
-- There have been so many deaths from California's lingering heat wave that authorities in one county began stacking bodies two to a gurney.





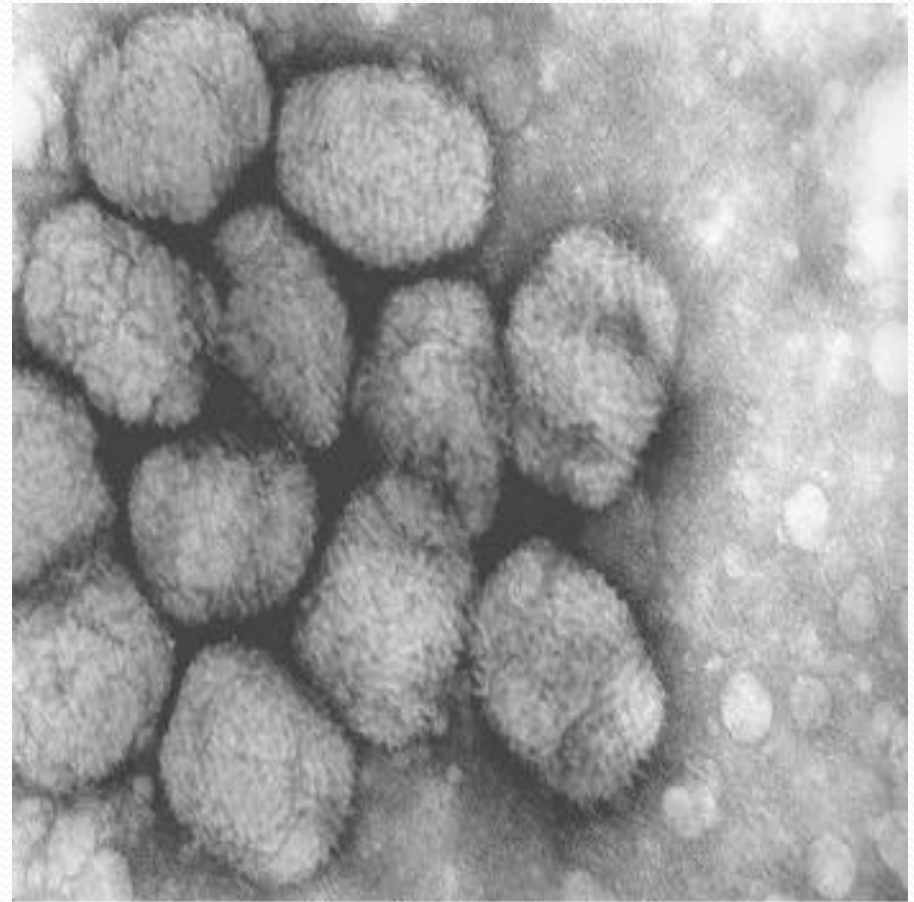
# Multiple Fatality Incidents

- Mother Nature
- Accidents



# Multiple Fatality Incidents

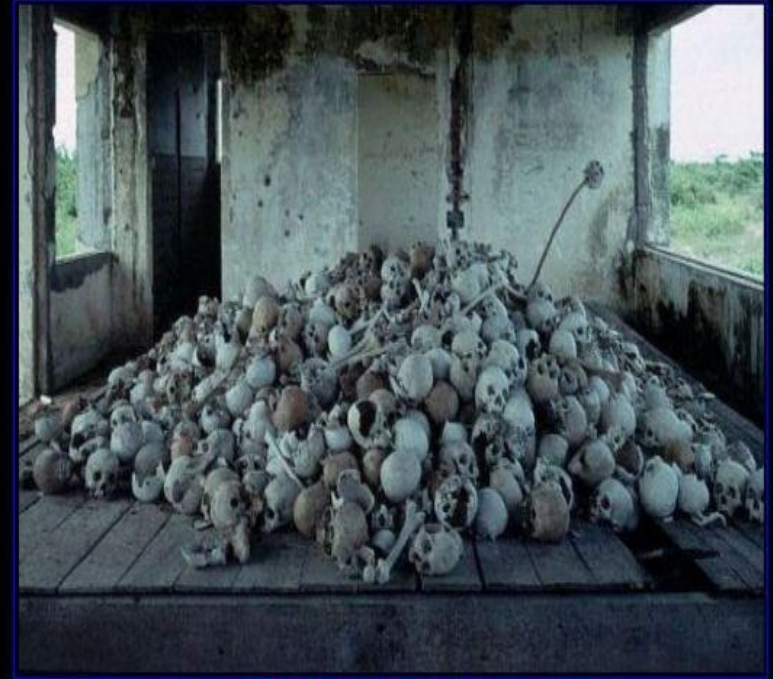
- Mother Nature
- Accidents
- Terrorism



Smallpox Virus (Variola Major)

# Multiple Fatality Incidents

- Mother Nature
- Accidents
- Terrorism
- Mass suicide / genocide



**GENOCIDE**

Cambodia, 1973. Rwanda, 1994. Bosnia, 1995. Darfur, 2005.

All that is needed for the triumph of evil is that good men do nothing.

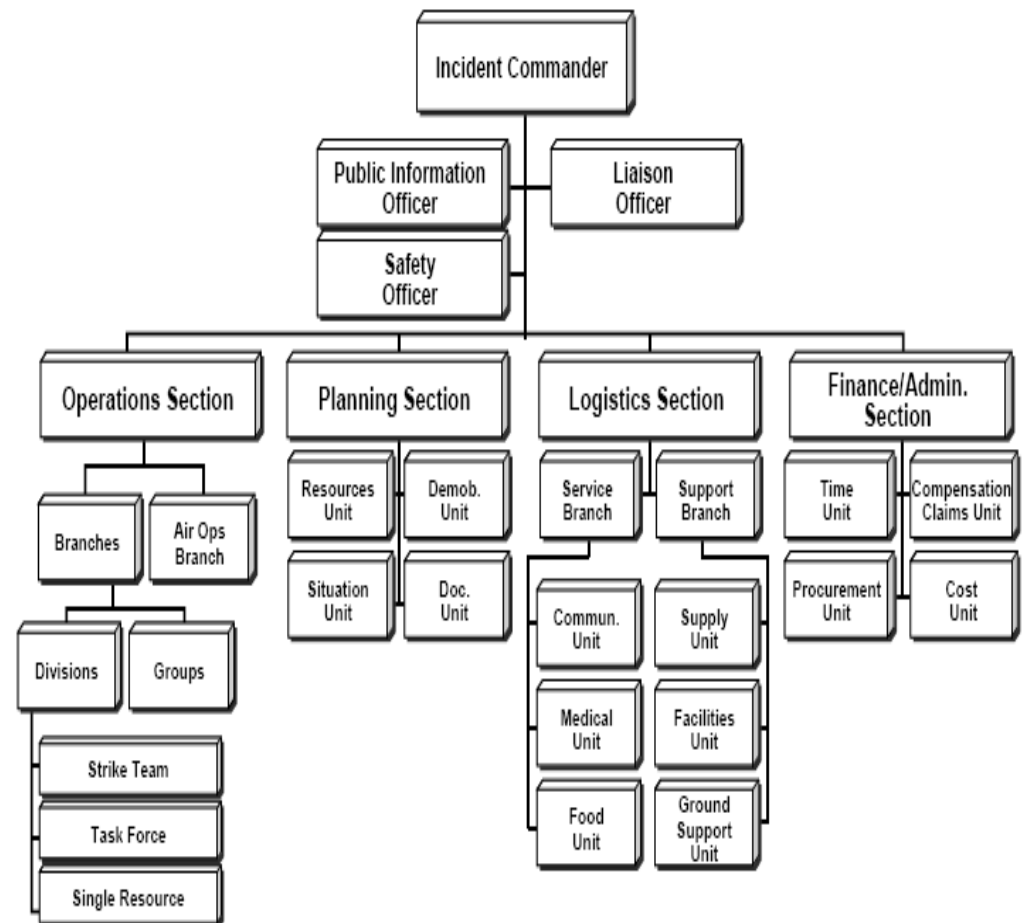
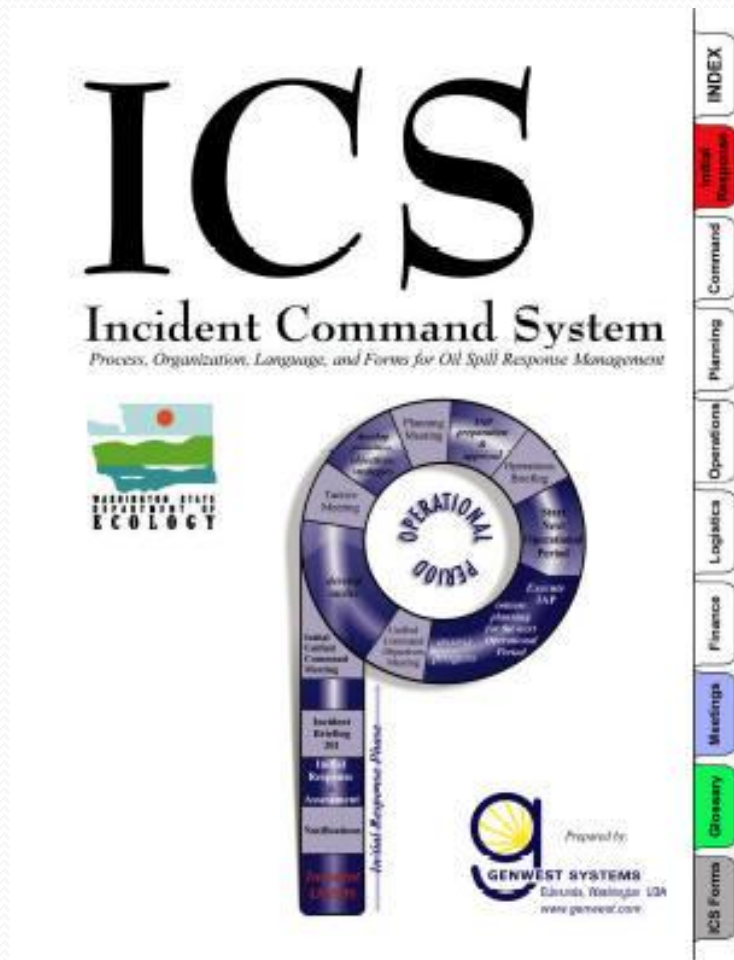


# Agency Involvement

- FAA, FBI, NTSB, FEMA
- Local and State Police
- Fire, Rescue, and Hospitals
- Medical Examiner
- Funeral Homes, DMORT
- Approved Volunteer Groups.



# Incident Command System



# Agency Responsibilities

- Each agency performs their usual role.....just on a larger scale



# Agency Responsibilities

- Fire Department
  - Scene safety
  - Decontamination





# Agency Responsibilities

- Fire Department
- Law Enforcement
  - Physical evidence



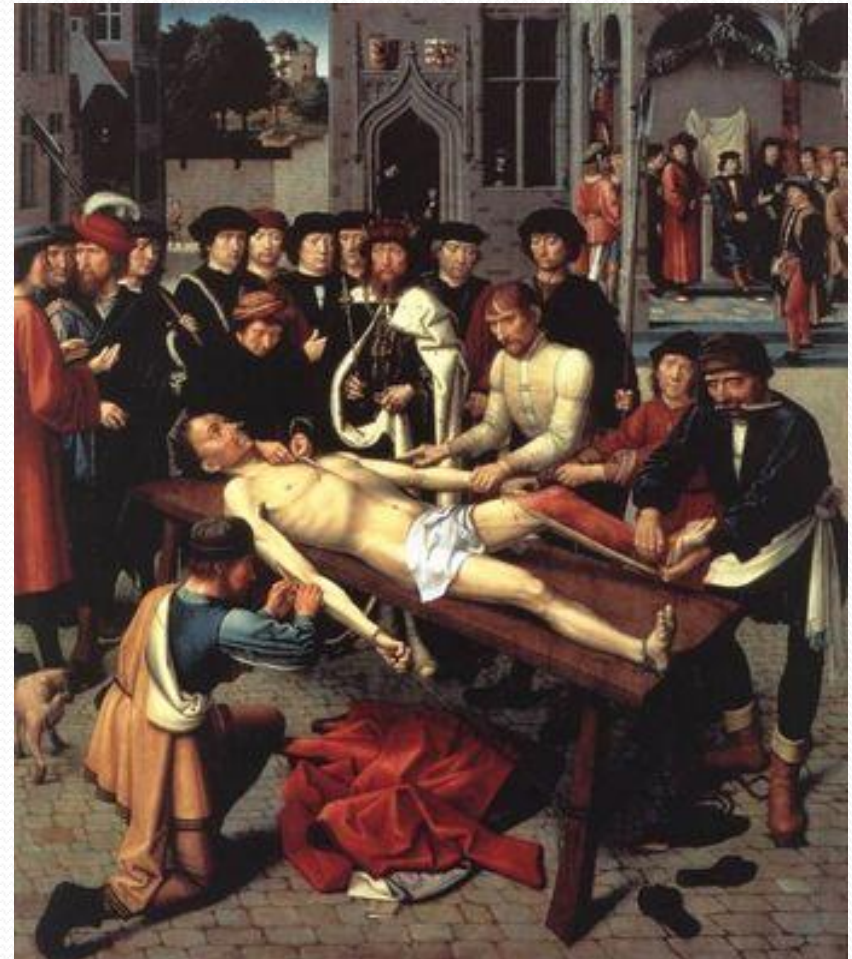
# Agency Responsibilities

- Fire Department
- Law Enforcement
- Funeral Home Personnel
  - Recovery of decedents



# Agency Responsibilities

- Fire Department
- Law Enforcement
- Funeral Home Personnel
- Medical Examiner



# Medical Examiner Responsibilities

- Coordinate recovery of remains and oversee collection point(s)



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- Coordinate recovery of remains and oversee collection point(s)
- Operate temporary and permanent morgues
- Examination of remains
  - Cause & manner of death
    - Collect evidence
  - Cataloging of personal effects
  - Identification
  - Coordinated release of remains and personal effects

# Streamlining of ME Tasks



# Pre-Morgue Clearance

- Decontamination
- Removal of explosives





# Pre-Morgue Clearance

- Decontamination
  - Chemical
  - Nuclear
  - Biological



# Into the Morgue....

## Where the magic happens



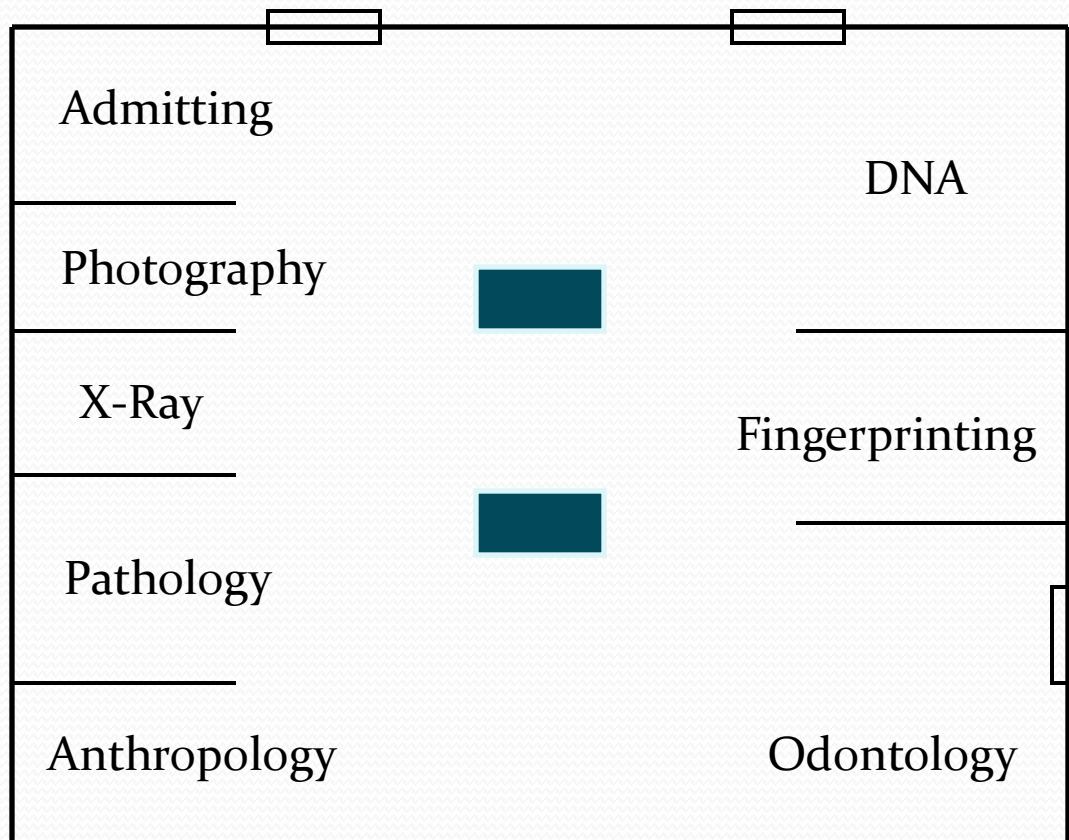
# Hurricane Katrina

## DMORT - Disaster Mortuary Operational Response Team-WMD



Based on FEMA's 10 regions

# Morgue Layout





# Admitting

- “As is” photography
- Verify remains as “safe to process”
- Ensure no co-mingling of remains



- Tracker is assigned
- File is generated
  - Coroner / ME case #
  - DMORT case #

4/10/2002

# Photography and Personal Effects

- Each stage of disrobing the remains is photographed
- Personal effects are cleaned and photographed



# Radiology

- Projectiles
  - Old & new
- Prior surgeries
  - Pacemaker
  - Surgical clips, screws, & plates
  - Hardware bearing serial numbers





# Pathology

- External examination
  - Signs of injury
  - Scars
  - Tattoos



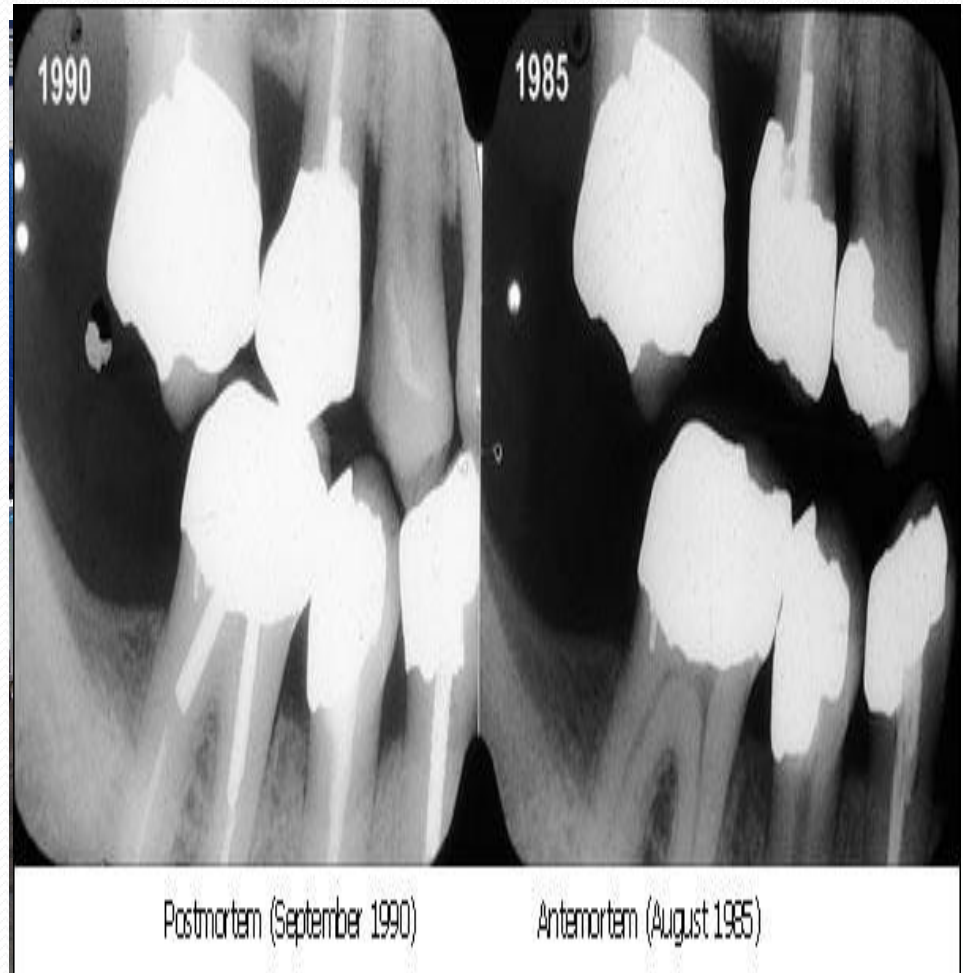
# Anthropology

- May or may not be utilized
- Anthropological assessment
  - Age
  - Sex
  - Ancestry
  - Stature
  - Trauma
  - Disease processes



# Odontology

- Postmortem charting
- X-ray



# Fingerprints

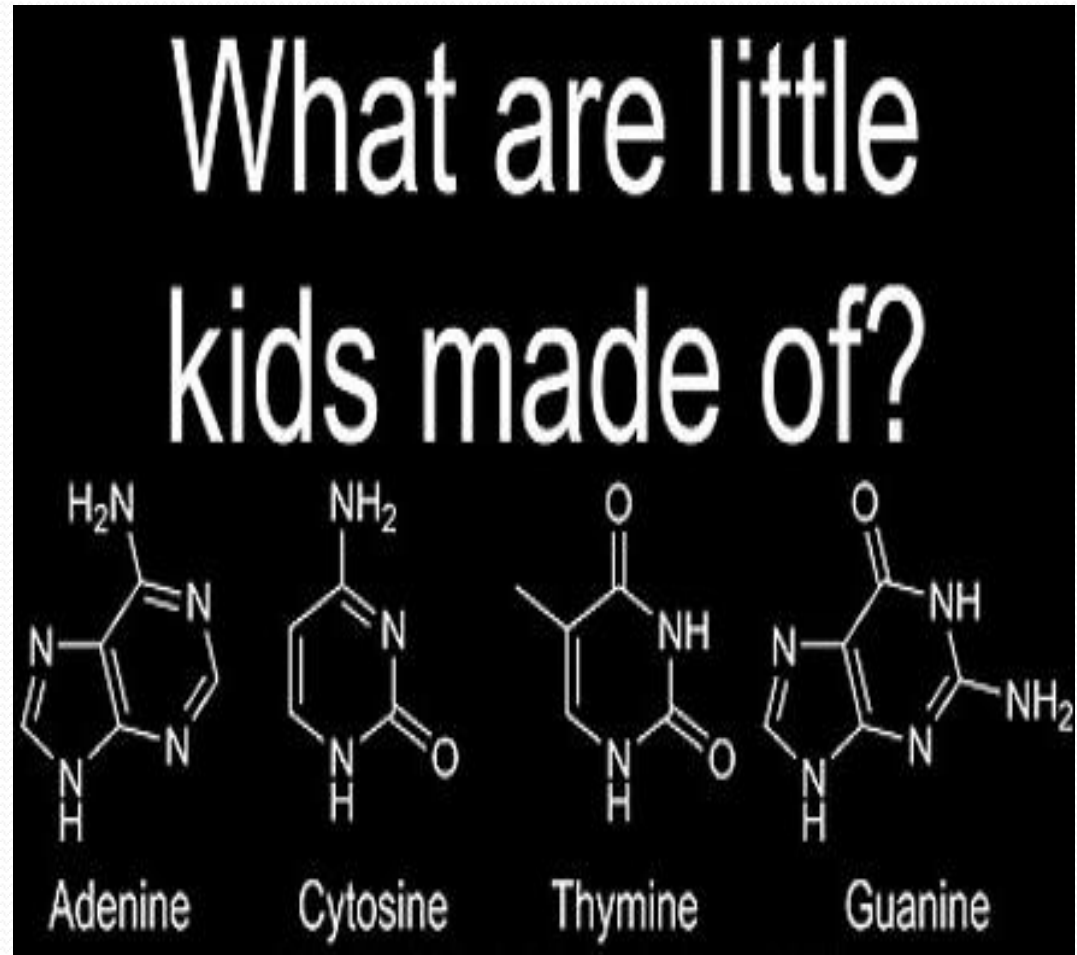
- Complicating factors
  - Mummification
  - Adipocere
- Importance of “gloves”





# DNA Collection

- Standard section
  - Anterior tibia
- May or may not be submitted



# Identification and Release



## VIP/DMORT Program

To be attached to the front of each Disaster Victim Packet

### Tracking Form

Incident Location \_\_\_\_\_ Incident Name \_\_\_\_\_

Body Bag # \_\_\_\_\_

First/Middle/Last Name: \_\_\_\_\_

Coroner Case # \_\_\_\_\_

Person performing station function must check and sign below when completed. "No" represents that this station function could not be performed.

#### Processing Station:

Section Rep. Signature: \_\_\_\_\_

Tracker's Name \_\_\_\_\_

Admitting ☐ Yes ☐ No

Personal Effects ☐ Yes ☐ No

Photography ☐ Yes ☐ No

Body Radiography ☐ Yes ☐ No

Fingerprint ☐ Yes ☐ No

Anthropology ☐ Yes ☐ No

Pathology ☐ Yes ☐ No

Embalming ☐ Yes ☐ No

DNA ☐ Yes ☐ No

Dental Examination ☐ Yes ☐ No

Dental Photography ☐ Yes ☐ No

Dental Radiology ☐ Yes ☐ No

After Processing Location \_\_\_\_\_

#### Identification Method

- ☐ Anthropology
- ☐ Radiographic
- ☐ Dental Records
- ☐ Fingerprints
- ☐ Pathology
- ☐ Personal Effects
- ☐ Photography
- ☐ DNA

Comments: \_\_\_\_\_

\_\_\_\_\_

This bag produced bag #'s: \_\_\_\_\_

Photo's: \_\_\_\_\_

NUMBER OF DENTAL PHOTOS \_\_\_\_\_

NUMBER OF SPECIMAN PHOTOS \_\_\_\_\_

NUMBER OF PERSONAL EFFECTS PHOTOS \_\_\_\_\_

Also included in this file: \_\_\_\_\_



# But what can I do????

- Roles of volunteers
  - Antemortem data collection
  - Tracker
  - Technical assistance
    - Fingerprints
    - Radiology
    - Dental examination and documentation
    - Autopsy assistant
    - Anthropology assistant
  - Evidence collection, documentation and management
  - Personal effects management
  - Storage and release of remains
  - Transport of remains

# Training to be made available

- Dental ID – online, DVD, drill
- X-ray identification -- online, DVD, drill
- Autopsy assistant – tutor
- Antemortem information collection and management – online, DVD



☐ **Jargge** 12/27/05(Tue)15:24 No.4058985 [[Reply](#)]

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>> ☐ **BeastUK** !vGZCxJ2I1s 12/27/05(Tue)15:26 No.4058999

How do you get that backwards b?

>> ☐ **Anonymous** 12/27/05(Tue)15:26 No.4059003

[>>4058999](#)  
its called d

# STUPIDITY

Taking it to a whole new level